Refer to the data below and answer the questions that follow.

In order to check the problem of obesity in growing kids, a survey was conducted across 15 schools in New Delhi. The students are ranked basis their weights with the heaviest student ranked 1, the second heaviest ranked 2 and so on. The ranks of the students are calculated in their respective schools as well as in the city. The table given below provides the School Rank and City Rank for certain set of students.

School	School Rank	City Rank	Number of students
A	1 - 100	1000 - 2000	50
B	25 - 100	3000 - 4000	75
C	100 - 500	1000 - 1500	200
D	200 - 400	3000 - 5000	125
E	100 - 500	200 - 2000	250
F	100 - 200	100 - 300	75
G	200 - 500	1000 - 1200	100
H	400 - 600	500 - 1000	200
I	60 - 125	2000 - 2500	40
J	100 - 300	1300 - 1525	150
K	50 - 300	300 - 600	100
L	500 - 600	5000 - 6000	50
M	300 - 800	900 - 1500	125
N	200 - 650	1000 - 2000	200
O	100 - 300	500 - 1000	75

Interpretation of the table: In all 50 students from school A have been considered in the survey. The ranks of these 50 students can be between 1 and 100 in the school and between 1000 and 2000 in the city. It is not necessary that the first or hundredth ranked student in the school are included among these 50 students. Similarly it is not necessary that the 1000th or 2000th ranked student in the city are included among these 50 students.
No two students can have the same City Rank. Similarly, no two students in the same school have the same rank.

1) The number of students that have School Rank numerically greater than 200 and City Rank numerically less than or equal to 1500 out of the students given in the table is at least.

Enter your response (as an integer) using the virtual keyboard in the box provided below.

Video Explanation:

Explanation:

The schools that satisfy the criteria are C, G, H, J and M.

All the students from schools H and M will necessarily satisfy both the criteria in the question.

School C : All 200 students have city rank less than or equal to 1500. Out of these 200 students, 101 students can have rank 100, 101, 102, …, 200. Therefore 200 – 101 = 99 students satisfy both the requirements.

School G : All 100 students have city rank less than or equal to 1500. Out of these 200 students, one student can have rank 200. Therefore, 100 – 1 = 99 students satisfy both the requirements.

School J : In all 101 students can have school ranks 100, 102, 102, …, 200. Therefore, minimum 150 – 101 = 49 students satisfy the requirement of school rank. Out of these 49 students, 25 students can have city rank 1501, 1502, …, 1525. Therefore, the number of students who satisfy both requirements = 49 – 25 = 24.

Therefore, the required answer = 99 + 99 + 200 + 24 + 125 = 547.

Therefore, the required answer is 547.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **14 secs**

Your Attempt: **Skipped**

% Students got it correct: **3 %**

2) If all the students with City Rank numerically less than or equal to 2000 have been declared "OBESE", then at least how many students from these 15 schools were declared as "OBESE"?

Enter your response (as an integer) in the box provided below.

Change Section here

Refer to the data below and answer the questions that follow.

In order to check the problem of obesity in growing kids, a survey was conducted across 15 schools in New Delhi. The students are ranked basis their weights with the heaviest student ranked 1, the second heaviest ranked 2 and so on. The ranks of the students are calculated in their respective schools as well as in the city. The table given below provides the School Rank and City Rank for certain set of students.

School	School Rank	City Rank	Number of students
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D	200 - 400	3000 - 5000	125
E	100 - 500	200 - 2000	250
F	100 - 200	100 - 300	75
G	200 - 500	1000 - 1200	100
H	400 - 600	500 - 1000	200
I	60 - 125	2000 - 2500	40
J	100 - 300	1300 - 1525	150
K	50 - 300	300 - 600	100
L	500 - 600	5000 - 6000	50
M	300 - 800	900 - 1500	125
N	200 - 650	1000 - 2000	200
O	100 - 300	500 - 1000	75

Interpretation of the table: In all 50 students from school A have been considered in the survey. The ranks of these 50 students can be between 1 and 100 in the school and between 1000 and 2000 in the city. It is not necessary that the first or hundredth ranked student in the school are included among these 50 students. Similarly it is not necessary that the 1000th or 2000th ranked student in the city are included among these 50 students.
No two students can have the same City Rank. Similarly, no two students in the same school have the same rank.

Video Explanation:

Explanation:

All the students from schools A, C, E, F, G, H, J, K, M, N and O have city rank less than or equal to 2000. Therefore, the required answer is 50 + 200 + 250 + 75 + 100 + 200 + 150 + 100 + 125 + 200 + 75 = 1525.

Therefore, the required answer is 1525.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **64 secs**

Your Attempt: **Skipped**

% Students got it correct: **36 %**

3) If all students with School Rank numerically less than or equal to 300 have been declared "overweight", what is the minimum number of overweight students from school N who definitely have City Rank numerically greater than 1100?

- 99
- 100
- 101
- None of these

Video Explanation:

Explanation:

It is possible that all 200 students from school N have School Rank more than 300. Therefore, the required answer is 0. Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **84 secs**

Your Attempt: **Skipped**

Change Section here

% Students got it correct: **51 %**

Refer to the data below and answer the questions that follow.

In order to check the problem of obesity in growing kids, a survey was conducted across 15 schools in New Delhi. The students are ranked basis their weights with the heaviest student ranked 1, the second heaviest ranked 2 and so on. The ranks of the students are calculated in their respective schools as well as in the city. The table given below provides the School Rank and City Rank for certain set of students.

School	School Rank	City Rank	Number of students
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F	100 - 200	100 - 300	75
G	200 - 500	1000 - 1200	100
H	400 - 600	500 - 1000	200
I	60 - 125	2000 - 2500	40
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M	300 - 800	900 - 1500	125
N	200 - 650	1000 - 2000	200
O	100 - 300	500 - 1000	75

Interpretation of the table: In all 50 students from school A have been considered in the survey. The ranks of these 50 students can be between 1 and 100 in the school and between 1000 and 2000 in the city. It is not necessary that the first or hundredth ranked student in the school are included among these 50 students. Similarly it is not necessary that the 1000th or 2000th ranked student in the city are included among these 50 students.
No two students can have the same City Rank. Similarly, no two students in the same school have the same rank.

4) If all the students with School Rank numerically less than or equal to 300 have been declared "overweight", then which of the following cannot be the number of overweight students from school D?

- 33
- 66
- 77
- 121

Video Explanation:

Explanation:

At least 24 and at most 101 students from school D can have rank numerically less than or equal to 300. Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **78 secs**

Your Attempt: **Skipped**

% Students got it correct: **88 %**

Loading...

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.

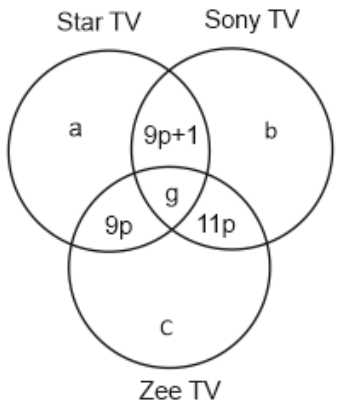
1) What is the best that can be said about the number of residents who watched only Star TV?

- At least 125
- At least 118
- At least 132
- At least 139

Video Explanation:

Explanation:

Let the number of residents who watch only Star TV, only Sony TV, only Zee TV and all three TV channels be a, b, c and g respectively. Further, let the number of residents who watch both Star TV and Zee TV, but not Sony TV be (9p), then the number of residents who watch both Sony TV and Zee TV but not Star TV = (11p) and the number of residents who watch only both Star TV and Sony TV but not Zee TV = (9p + 1).

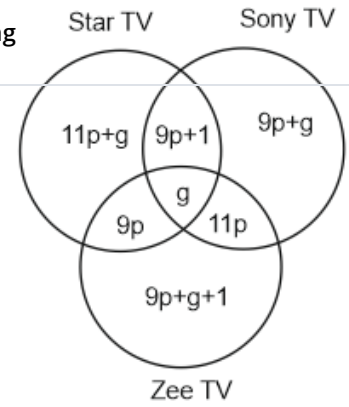


Total number of residents = 600, thus, a + b + c + (9p + 1) + (9p) + (11p) + g = 600 .....(i)
Also given, a + 9p + 1 + 9p + g = 300; b + 9p + 1 + g + 11p = 300; c + 9p + 11p + g = 300
a + b + c + (18p + 2) + 18p + 22p + 3g = 900 ..... (ii)
Subtracting equation (i) from (ii)
29p + 1 + 2g = 300 .... (iii)

Now,
a + (9p + 1) + 9p + g = 300 = 29p + 1 + 2g
Thus, a = 11p + g
b + (9p + 1) + 11p + g = 300 = 29p + 1 + 2g
Thus, b = 9p + g
c + 9p + 11p + g = 300 = 29p + 1 + 2g
Thus, c = 9p + g + 1

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.



We know, 29p + 1 + 2g = 300
29p + 2g = 299
Possible solutions for p and g are as follows:
p = 9; g = 19
p = 7; g = 48
p = 5; g = 77
p = 3; g = 106
p = 1; g = 135

The number of residents who watch only Star TV = 11p + g
It will be minimum for p = 9; g = 19 and maximum for p = 1; g = 135
Minimum 11p + g = 118
Maximum 11p + g = 146
Hence, [2].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **324 secs**

Your Attempt: **Skipped**

% Students got it correct: **55 %**

2) If the number of residents who watched only Zee TV is 134, then how many residents watched all the three channels?

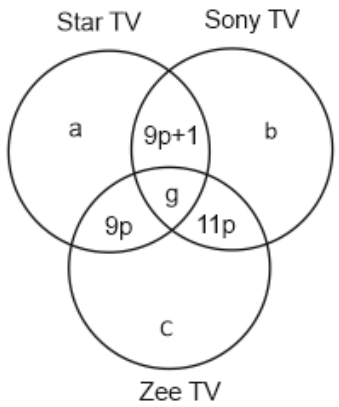
- 77
- 85
- 106 ✓
- 135

Video Explanation:

Refer to the data below and answer the questions that follow.

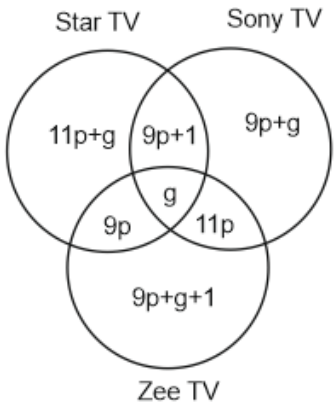
A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.

Let the number of residents who watch only Star TV, only Sony TV, only Zee TV and all three TV channels be a, b, c and g respectively. Further, let the number of residents who watch both Star TV and Zee TV, but not Sony TV be (9p), then the number of residents who watch both Sony TV and Zee TV but not Star TV = (11p) and the number of residents who watch only both Star TV and Sony TV but not Zee TV = (9p + 1).



Total number of residents = 600, thus, a + b + c + (9p + 1) + (9p) + (11p) + g = 600 .....(i)
Also given, a + 9p + 1 + 9p + g = 300; b + 9p + 1 + g + 11p = 300; c + 9p + 11p + g = 300
a + b + c + (18p + 2) + 18p + 22p + 3g = 900 ..... (ii)
Subtracting equation (i) from (ii)
29p + 1 + 2g = 300 .... (iii)

Now,
a + (9p + 1) + 9p + g = 300 = 29p + 1 + 2g
Thus, a = 11p + g
b + (9p + 1) + 11p + g = 300 = 29p + 1 + 2g
Thus, b = 9p + g
c + 9p + 11p + g = 300 = 29p + 1 + 2g
Thus, c = 9p + g + 1



We know, 29p + 1 + 2g = 300
29p + 2g = 299
Possible solutions for p and g are as follows:
p = 9; g = 19
p = 7; g = 48
p = 5; g = 77
p = 3; g = 106
p = 1; g = 135

Given, 9p + g + 1 = 134
For the given condition, p = 3 and g = 106.
Hence, [3].

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.

Time taken by you: **484 secs**

Avg Time taken by all students: **299 secs**

Your Attempt: **Correct**

% Students got it correct: **82 %**

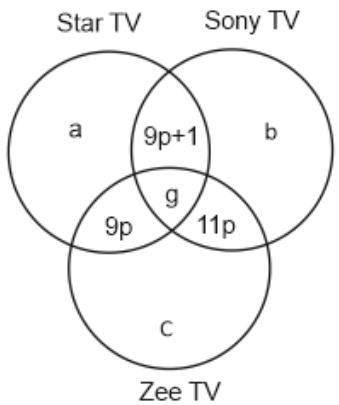
3) If the number of residents who watched all three channels is 77, then how many residents watched both Star TV and Sony TV but not Zee TV?

- 28
- 10
- 46 ✓
- 64

Video Explanation:

Explanation:

Let the number of residents who watch only Star TV, only Sony TV, only Zee TV and all three TV channels be a, b, c and g respectively. Further, let the number of residents who watch both Star TV and Zee TV, but not Sony TV be (9p), then the number of residents who watch both Sony TV and Zee TV but not Star TV = (11p) and the number of residents who watch only both Star TV and Sony TV but not Zee TV = (9p + 1).

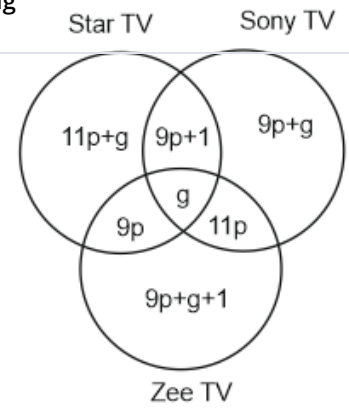


Total number of residents = 600, thus, a + b + c + (9p + 1) + (9p) + (11p) + g = 600 .....(i)
Also given, a + 9p + 1 + 9p + g = 300; b + 9p + 1 + g + 11p = 300; c + 9p + 11p + g = 300
a + b + c + (18p + 2) + 18p + 22p + 3g = 900 ..... (ii)
Subtracting equation (i) from (ii)
29p + 1 + 2g = 300 .... (iii)

Now,
a + (9p + 1) + 9p + g = 300 = 29p + 1 + 2g
Thus, a = 11p + g
b + (9p + 1) + 11p + g = 300 = 29p + 1 + 2g
Thus, b = 9p + g
c + 9p + 11p + g = 300 = 29p + 1 + 2g
Thus, c = 9p + g + 1

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.



We know, 29p + 1 + 2g = 300
29p + 2g = 299
Possible solutions for p and g are as follows:
p = 9; g = 19
p = 7; g = 48
p = 5; g = 77
p = 3; g = 106
p = 1; g = 135

As g = 77, p = 5.
Number of residents who watch both Star TV and Sony TV only = 9p + 1 = 45 + 1 = 46
Hence, [3].

Correct Answer: ⌄

Time taken by you: **272 secs**

Avg Time taken by all students: **163 secs**

Your Attempt: **Correct**

% Students got it correct: **84 %**

4) What is the maximum number of residents who watched exactly two channels? −

- 204
- 213
- 262 ✓
- 271

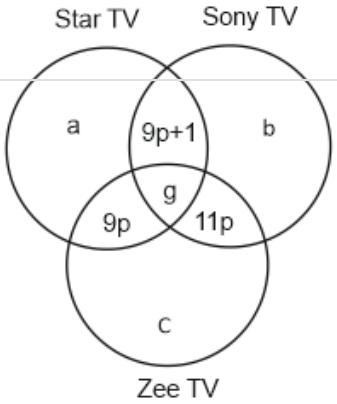
Video Explanation: ⌄

Explanation: ⌄

Let the number of residents who watch only Star TV, only Sony TV, only Zee TV and all three TV channels be a, b, c and g respectively.
Further, let the number of residents who watch both Star TV and Zee TV, but not Sony TV be (9p), then the number of residents who watch both Sony TV and Zee TV but not Star TV = (11p) and the number of residents who watch only both Star TV and Sony TV but not Zee TV = (9p + 1).

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.



Total number of residents = 600, thus, a + b + c + (9p + 1) + (9p) + (11p) + g = 600 .....(i)
Also given, a + 9p + 1 + 9p + g = 300; b + 9p + 1 + g + 11p = 300; c + 9p + 11p + g = 300
a + b + c + (18p + 2) + 18p + 22p + 3g = 900 ..... (ii)
Subtracting equation (i) from (ii)
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Now,
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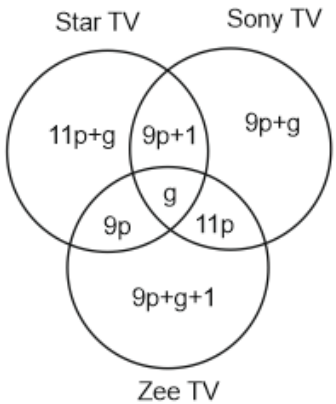
Thus, a = 11p + g
b + (9p + 1) + 11p + g = 300 = 29p + 1 + 2g
Thus, b = 9p + g
c + 9p + 11p + g = 300 = 29p + 1 + 2g
Thus, c = 9p + g + 1



We know, 29p + 1 + 2g = 300
29p + 2g = 299
Possible solutions for p and g are as follows:
p = 9; g = 19
p = 7; g = 48
p = 5; g = 77
p = 3; g = 106
p = 1; g = 135

Number of residents who watch exactly two channels = 29p + 1
The maximum value of 29p + 1 will be when p = 9.
29p + 1 = 262
Hence, [3].

Correct Answer: ⌄

Time taken by you: **239 secs**

Avg Time taken by all students: **126 secs**

Your Attempt: **Correct**

Refer to the data below and answer the questions that follow.

A cable operator conducted a survey among 600 residents of Indira Vihar. Each resident watched at least one TV channel among Star TV, Sony TV and Zee TV. The number of residents who watched both Star TV and Zee TV but not Sony TV are one less than the number of residents who watched both Star TV and Sony TV but not Zee TV. The ratio of the number of residents who watched both Star TV and Zee TV but not Sony TV to the number of residents who watched both Sony TV and Zee TV but not Star TV is 9 : 11. Number of residents who watched Sony TV, Star TV and Zee TV is equal and that is 300.

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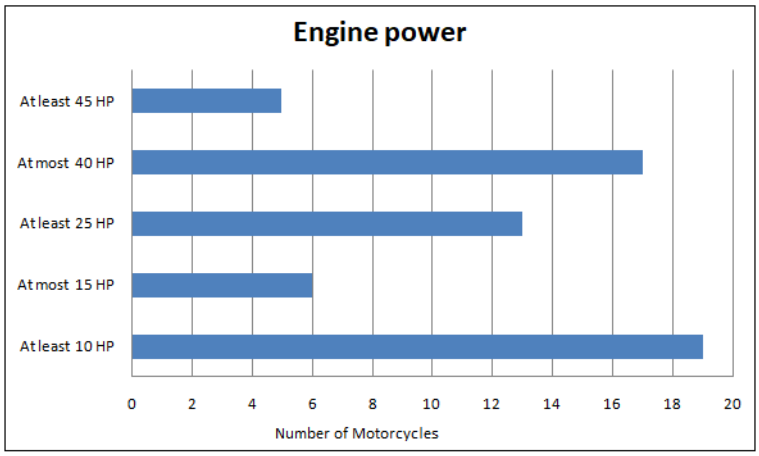
Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



The numbers of motorcycles of each brand were distinct multiples of 2. All the 10 motorcycles of the brand Yezdi had different engine powers. The table below gives information of the 'Total HP' of the given brands. Total HP is the sum of the engine powers of all the motorcycles of a particular brand.

Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

1) What is the Total Horse Power of the motorcycles displayed at the Expo?

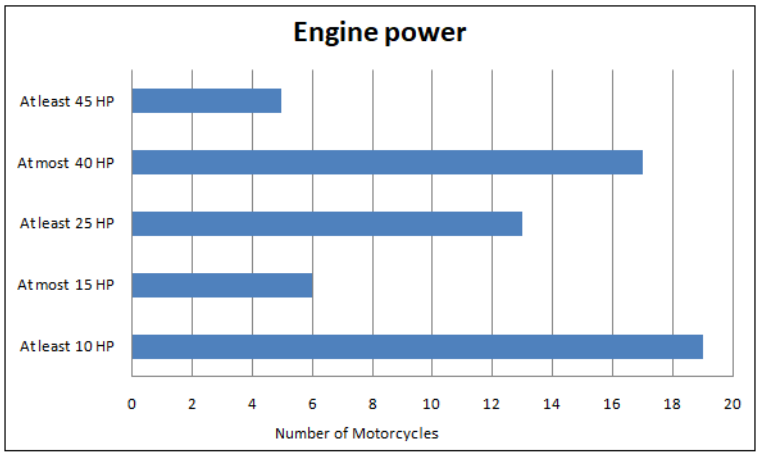
Enter your response (as an integer) using the virtual keyboard in the box provided below.

645

Video Explanation:

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



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Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

From the bar chart given above, we can determine the number of motorcycles with different engine powers as,

Engine Power (HP)	Number of motorcycles
5	3
10/15	3
20	3
25/30/35/40	8
45/50	5

Asthere is exactly one bike of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo', the following table can be made:

Engine Power (HP)	5	10	15	20	25	30	35	40	45	50
Number of motorcycles	3	1	2	3	1	1	1	5	1	4

Now, the brand Yezdi has 10 motorcycles and all of them have different engine powers. Thus, each of the 10 motorcycles of Yezdi will have engine powers from among 5, 10, 15, 20, 25, 30, 35, 40, 45 and 50 HP, one each. The remaining 12 motorcycles have to be distributed among 3 brands. We will have following two cases:

Case 1:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	50, 40, 40, 20, 20, 5	175
Luna	4	40, 40, 15, 5	100

Case 2:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	40, 40, 40, 20, 20, 15	175
Luna	4	50, 40, 5, 5	100

Therefore, the required answer is 650.

Correct Answer:

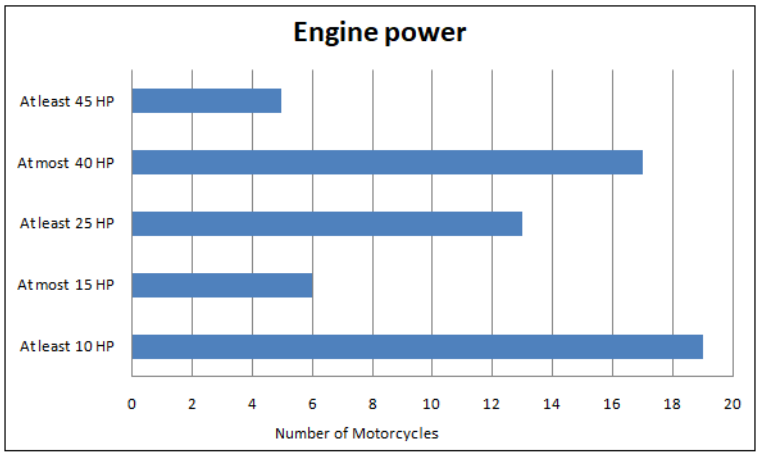
Time taken by you: **353 secs**

Avg Time taken by all students: **392 secs**

Your Attempt: **Wrong**

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



The numbers of motorcycles of each brand were distinct multiples of 2. All the 10 motorcycles of the brand Yezdi had different engine powers. The table below gives information of the 'Total HP' of the given brands. Total HP is the sum of the engine powers of all the motorcycles of a particular brand.

Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

2) How many motorcycles in the expo had an engine power of 50 HP?

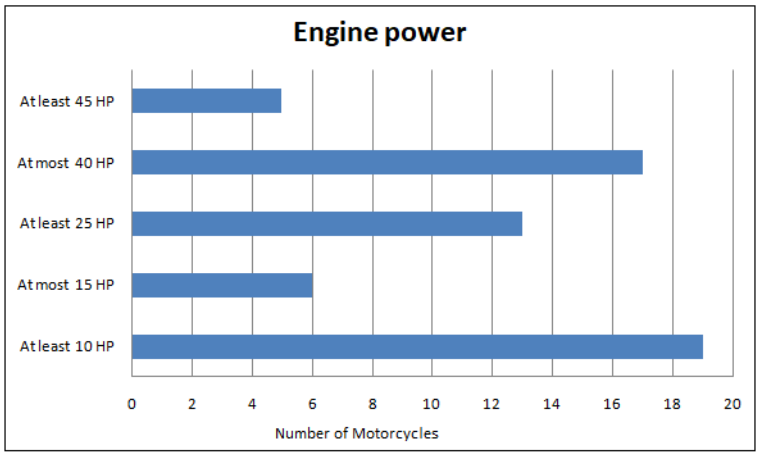
Enter your response (as an integer) using the virtual keyboard in the box provided below.

4

Video Explanation:

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



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Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

From the bar chart given above, we can determine the number of motorcycles with different engine powers as,

Engine Power (HP)	Number of motorcycles
5	3
10/15	3
20	3
25/30/35/40	8
45/50	5

Asthere is exactly one bike of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo', the following table can be made:

Engine Power (HP)	5	10	15	20	25	30	35	40	45	50
Number of motorcycles	3	1	2	3	1	1	1	5	1	4

Now, the brand Yezdi has 10 motorcycles and all of them have different engine powers. Thus, each of the 10 motorcycles of Yezdi will have engine powers from among 5, 10, 15, 20, 25, 30, 35, 40, 45 and 50 HP, one each. The remaining 12 motorcycles have to be distributed among 3 brands. We will have following two cases:

Case 1:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	50, 40, 40, 20, 20, 5	175
Luna	4	40, 40, 15, 5	100

Case 2:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	40, 40, 40, 20, 20, 15	175
Luna	4	50, 40, 5, 5	100

Four of the given motorcycles had an engine power of 50 HP.
Therefore, the required answer is 4.

Correct Answer: ⌄

Time taken by you: **6 secs**

Avg Time taken by all students: **94 secs**

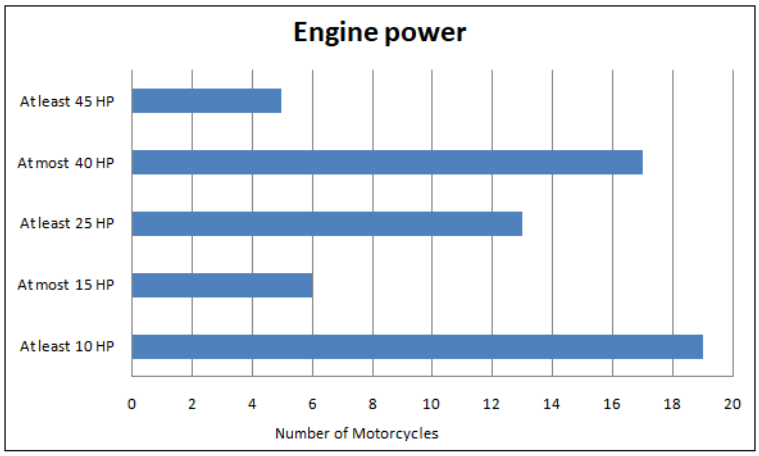
Your Attempt: **Correct**

Change Section here

% Students got it correct: **72 %**

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



The numbers of motorcycles of each brand were distinct multiples of 2. All the 10 motorcycles of the brand Yezdi had different engine powers. The table below gives information of the 'Total HP' of the given brands. Total HP is the sum of the engine powers of all the motorcycles of a particular brand.

Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

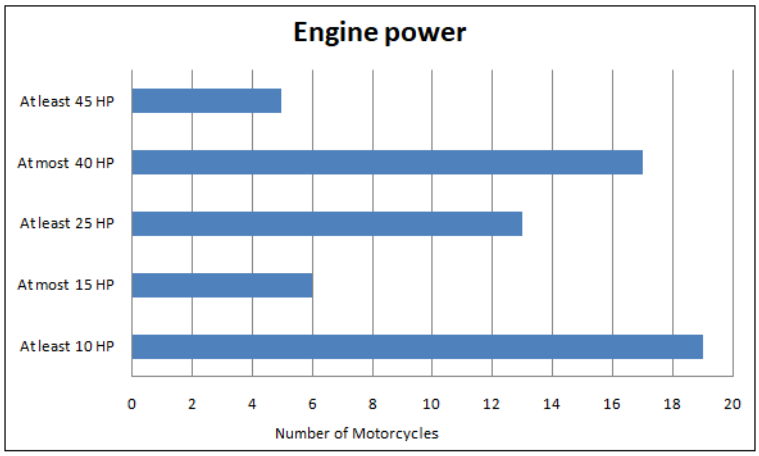
3) How many 40 HP motorcycles were displayed by Rajdoot?

- 3 or 4
- 2 or 3 ✓
- 1 or 2
- 0 or 1

Video Explanation:

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



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Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

From the bar chart given above, we can determine the number of motorcycles with different engine powers as,

Engine Power (HP)	Number of motorcycles
5	3
10/15	3
20	3
25/30/35/40	8
45/50	5

Asthere is exactly one bike of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo', the following table can be made:

Engine Power (HP)	5	10	15	20	25	30	35	40	45	50
Number of motorcycles	3	1	2	3	1	1	1	5	1	4

Now, the brand Yezdi has 10 motorcycles and all of them have different engine powers. Thus, each of the 10 motorcycles of Yezdi will have engine powers from among 5, 10, 15, 20, 25, 30, 35, 40, 45 and 50 HP, one each. The remaining 12 motorcycles have to be distributed among 3 brands. We will have following two cases:

Case 1:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	50, 40, 40, 20, 20, 5	175
Luna	4	40, 40, 15, 5	100

Case 2:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	40, 40, 40, 20, 20, 15	175
Luna	4	50, 40, 5, 5	100

Either 2 or 3 motorcycles of 40 HP were displayed by Rajdoot at the Expo. Hence, [2].

Correct Answer:

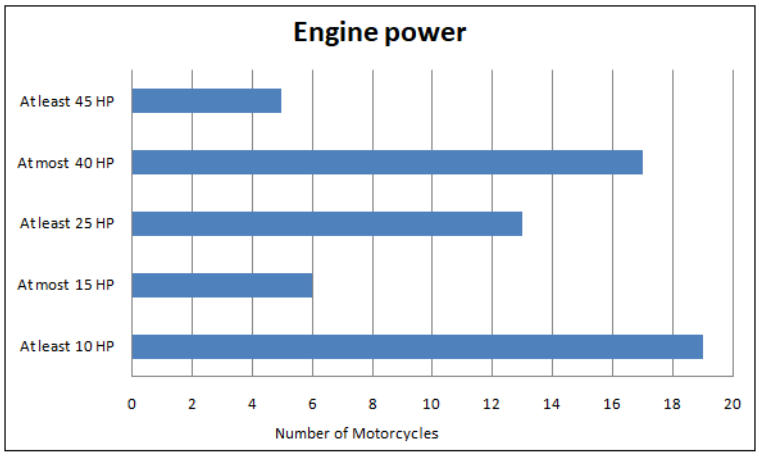
Time taken by you: **245 secs**

Avg Time taken by all students: **118 secs**

Your Attempt: **Correct**

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



The numbers of motorcycles of each brand were distinct multiples of 2. All the 10 motorcycles of the brand Yezdi had different engine powers. The table below gives information of the 'Total HP' of the given brands. Total HP is the sum of the engine powers of all the motorcycles of a particular brand.

Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

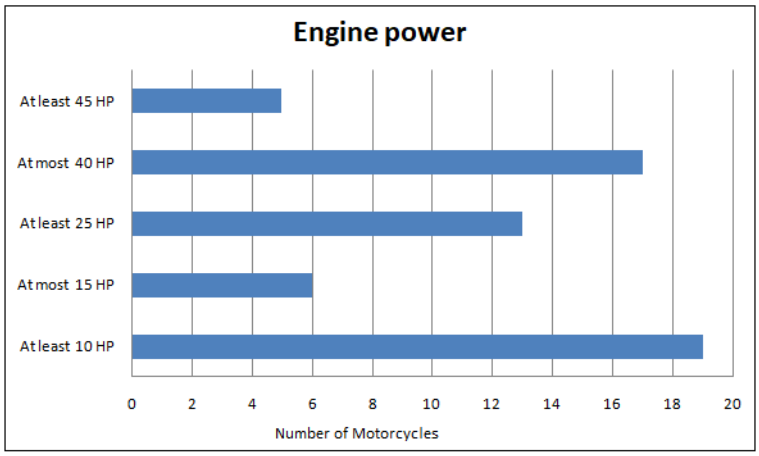
4) If Luna displayed at least one 50 HP motorcycle, then what can be the minimum engine power of a motorcycle of the brand Rajdoot?

- 5
- 15 ✓
- 20
- 25

Video Explanation:

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



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Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
Yezdi	10	
Rajdoot	6	175
Luna	4	100

From the bar chart given above, we can determine the number of motorcycles with different engine powers as,

Engine Power (HP)	Number of motorcycles
5	3
10/15	3
20	3
25/30/35/40	8
45/50	5

As there is exactly one bike of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo', the following table can be made:

Engine Power (HP)	5	10	15	20	25	30	35	40	45	50
Number of motorcycles	3	1	2	3	1	1	1	5	1	4

Now, the brand Yezdi has 10 motorcycles and all of them have different engine powers. Thus, each of the 10 motorcycles of Yezdi will have engine powers from among 5, 10, 15, 20, 25, 30, 35, 40, 45 and 50 HP, one each. The remaining 12 motorcycles have to be distributed among 3 brands. We will have following two cases:

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Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	50, 40, 40, 20, 20, 5	175
Luna	4	40, 40, 15, 5	100

Case 2:

Brand	Number of Motorcycles at the Expo	HP for the bikes displayed	Total HP
Jawa	2	50, 50	100
Yezdi	10	5 to 50 (All multiples of 5)	275
Rajdoot	6	40, 40, 40, 20, 20, 15	175
Luna	4	50, 40, 5, 5	100

Here case 2 is valid. Therefore, the minimum engine power of a motorcycle of the brand Rajdoot = 15 HP
Hence, [2].

Correct Answer:

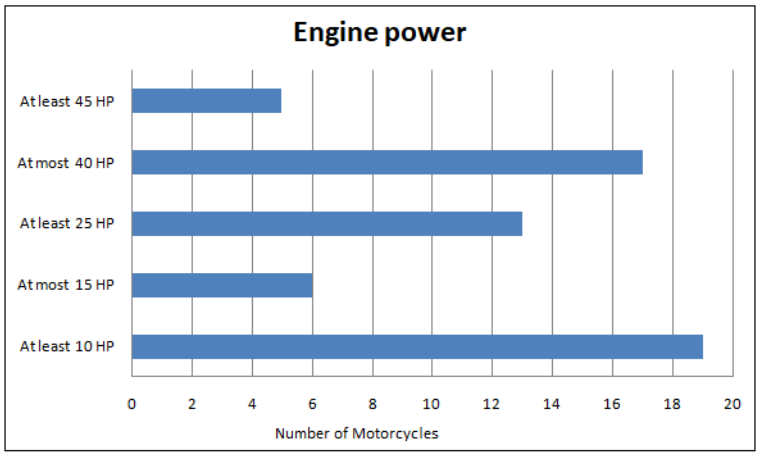
Avg Time taken by all students: **80 secs**

Your Attempt: **Correct**

% Students got it correct: **59 %**

Refer to the data below and answer the questions that follow.

22 models of motorcycles of four different brands - Jawa, Yezdi, Rajdoot and Luna were displayed at the 'Bikes Expo' held in Mumbai. The bar chart below gives the statistics of all the motorcycles as per their engine powers. The engine powers of all the motorcycles were multiples of 5 and lied between 5 HP and 50 HP, both included. There is exactly one motorcycle of 10 HP, 25 HP, 30 HP, 35 HP and 45 HP in the 'Bikes Expo'.



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Brand	Number of Motorcycles at the Expo	Total HP
Jawa	2	100
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Rajdoot	6	175
Luna	4	100

Refer to the data below and answer the questions that follow.

The following table gives information about the placement of the students of the 8th semester of engineering in Imperial College of Engineering.

	2014	2015	2016	2017	2018
Percentage of boys out of total students	60	40	60	50	50
Percentage of students got placed out of the total students	70	80	50	75	75
Percentage of students who got placed outside India among those who got placed	65	70	85	50	75

It is known that the total number of students in the college in the 8th semester registered an increase of 20% in 2016 and 2015 over the previous year, and an increase of 15% in 2017 over 2016. The number of students in the 8th semester in the college in 2018 remained the same as in 2017.
The students in the 8th semester in each year were either boys or girls. All the students who got placed were either placed in India or outside India.

1) In which of the following year, the number of girls was the highest in the 8th semester in the college?

- 2014
- 2015 ✗
- 2016
- 2017

Video Explanation:

Explanation:

	2014	2015	2016	2017	2018
Total number of students in 8th semester	100a	120a	144a	165.6a	165.6a
Number of Boys	60a	48a	86.4a	82.8a	82.8a
Number of girls	40a	72a	57.6a	82.8a	82.8a
Number of students who got placed	70a	96a	72a	124.2a	124.2a
Number of students who got placed outside India	45.5a	67.2a	61.2a	62.1a	93.15a
Number of students who got placed in India	24.5a	28.8a	10.8a	62.1a	31.05a

Hence, [4].

Correct Answer:

Time taken by you: **232 secs**

Avg Time taken by all students: **462 secs**

Your Attempt: **Wrong**

% Students got it correct: **84 %**

2) In which of the following year, the number of students who got placed in India was the highest?

- 2015
- 2016
- 2017 ✓
- 2018

Video Explanation:

Refer to the data below and answer the questions that follow.

The following table gives information about the placement of the students of the 8th semester of engineering in Imperial College of Engineering.

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	2014	2015	2016	2017	2018
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Number of students who got placed	70a	96a	72a	124.2a	124.2a
Number of students who got placed outside India	45.5a	67.2a	61.2a	62.1a	93.15a
Number of students who got placed in India	24.5a	28.8a	10.8a	62.1a	31.05a

Hence, [3].

Correct Answer:

Time taken by you: **64 secs**

Avg Time taken by all students: **151 secs**

Your Attempt: **Correct**

% Students got it correct: **89 %**

3) Which of the following is the closest ratio to the ratio of the number of students who placed outside India in the year 2016 to the number of students who placed in India in the year 2018?

- 3 : 2
- 5 : 4
- 2 : 1 ✓
- 4 : 3

Video Explanation:

Explanation:

	2014	2015	2016	2017	2018
Total number of students in 8th semester	100a	120a	144a	165.6a	165.6a
Number of Boys	60a	48a	86.4a	82.8a	82.8a
Number of girls	40a	72a	57.6a	82.8a	82.8a
Number of students who got placed	70a	96a	72a	124.2a	124.2a
Number of students who got placed outside India	45.5a	67.2a	61.2a	62.1a	93.15a
Number of students who got placed in India	24.5a	28.8a	10.8a	62.1a	31.05a

The required ratio is 61.2 : 31.05 ≈ 2 : 1.
Hence, [3].

Correct Answer:

Time taken by you: **93 secs**

Avg Time taken by all stu

Change Section here ▼

Your Attempt: **Correct**

% Students got it correct: **85 %**

Refer to the data below and answer the questions that follow.

The following table gives information about the placement of the students of the 8th semester of engineering in Imperial College of Engineering.

	2014	2015	2016	2017	2018
Percentage of boys out of total students	60	40	60	50	50
Percentage of students got placed out of the total students	70	80	50	75	75
Percentage of students who got placed outside India among those who got placed	65	70	85	50	75

It is known that the total number of students in the college in the 8th semester registered an increase of 20% in 2016 and 2015 over the previous year, and an increase of 15% in 2017 over 2016. The number of students in the 8th semester in the college in 2018 remained the same as in 2017.
The students in the 8th semester in each year were either boys or girls. All the students who got placed were either placed in India or outside India.

4) In 2014, 50% of the boys of the 8th semester got placed. In 2015 this percentage was 60%, in 2016 it was 70%, in 2017 it was 80% and in 2018 it was 90%. In which year, the number of girls who got placed was the highest?

- 2014
- 2015
- 2016
- 2017

Video Explanation: ⌄

Explanation: ⌄

	2014	2015	2016	2017	2018
Total number of students in 8th semester	100a	120a	144a	165.6a	165.6a
Number of Boys	60a	48a	86.4a	82.8a	82.8a
Number of girls	40a	72a	57.6a	82.8a	82.8a
Number of students who got placed	70a	96a	72a	124.2a	124.2a
Number of students who got placed outside India	45.5a	67.2a	61.2a	62.1a	93.15a
Number of students who got placed in India	24.5a	28.8a	10.8a	62.1a	31.05a

Year	2014	2015	2016	2017	2018
Number of Boys	60a	48a	86.4a	82.8a	82.8a
Number of Boys who got placed (b)	30a	28.8a	60.48a	66.24a	74.52a
Number of students who got placed (p)	70a	96a	72a	124.2a	124.2a
Number of girls who got placed (p – b)	40a	67.2a	11.52a	57.96a	49.68a

Hence, [2].

Correct Answer: ⌄

Time taken by you: **69 secs**

Avg Time taken by all students: **150 secs**

Your Attempt: **Skipped**

% Students got it correct: **76 %**

Refer to the data below and answer the questions that follow.

The following table gives information about the placement of the students of the 8th semester of engineering in Imperial College of Engineering.

Loading...

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Percentage of boys out of total students	60	40	60	50	50
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It is known that the total number of students in the college in the 8th semester registered an increase of 20% in 2016 and 2015 over the previous year, and an increase of 15% in 2017 over 2016. The number of students in the 8th semester in the college in 2018 remained the same as in 2017.
The students in the 8th semester in each year were either boys or girls. All the students who got placed were either placed in India or outside India.

Refer to the data below and answer the questions that follow.

In a video game called, 'Business', a house is purchased or sold (through virtual currency) at each level in the 5-level game. At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1.
Aambi and Bambi played this game, competing with each other. They both made different selling and buying strategies. Aambi made the strategy to buy 10 houses when the price goes down as compared to the previous level and sell 10 houses when the price goes up as compared to the previous level. Bambi made the strategy to buy 10 houses when the price goes below $10 and sell 10 houses when the price goes above $11. The beginning price of each house in any level is the same as the closing price of each house at the end of the previous level. Bambi and Aambi started with the same number of houses and had the same amount of cash, and had enough of both. At the end of the level 5, the price of each house was $11.

1) At the end of level 5, how much more cash did Aambi have than what he had at the start of the game?

- $120
- $130
- $140
- Cannot be determined

Video Explanation:

Explanation:

Using this, 'At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1. At the end of level 5, the price of each house is $11.', the following possible cases of price at the beginning and end of the each level can be drawn :

	Case 1		Case 2		Case 3		Case 4		Case 5	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	11	10	11	10	11	10	11
2	11	12	11	10	11	10	11	12	11	12
3	12	11	10	9	10	11	12	13	12	11
4	11	10	9	10	11	10	13	12	11	12
5	10	11	10	11	10	11	12	11	12	11

	Case 6		Case 7		Case 8		Case 9		Case 10	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	9	10	9	10	9	10	9
2	11	10	9	10	9	10	9	10	9	8
3	10	11	10	11	10	11	10	9	8	9
4	11	12	11	12	11	10	9	10	9	10
5	12	11	12	11	10	11	10	11	10	11

In each case, Aambi sold 30 houses and bought 20 houses in the game. The selling amount – buying amount is $130 in each case.
Thus, Aambi had $130 more cash at the end of level 5.
Hence, [2].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **166 secs**

Your Attempt: **Skipped**

% Students got it correct: **36 %**

2) What can be the maximum difference between the amount of cash with Aambi and Bambi at the end of level 5?

Enter your response (as an integer) using the virtual keyboard in the box provided below.

Video Explanation: Change Section here

Refer to the data below and answer the questions that follow.

In a video game called, 'Business', a house is purchased or sold (through virtual currency) at each level in the 5-level game. At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1.
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Explanation:

Using this, 'At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1. At the end of level 5, the price of each house is $11.', the following possible cases of price at the beginning and end of the each level can be drawn :

	Case 1		Case 2		Case 3		Case 4		Case 5	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	11	10	11	10	11	10	11
2	11	12	11	10	11	10	11	12	11	12
3	12	11	10	9	10	11	12	13	12	11
4	11	10	9	10	11	10	13	12	11	12
5	10	11	10	11	10	11	12	11	12	11

	Case 6		Case 7		Case 8		Case 9		Case 10	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	9	10	9	10	9	10	9
2	11	10	9	10	9	10	9	10	9	8
3	10	11	10	11	10	11	10	9	8	9
4	11	12	11	12	11	10	9	10	9	10
5	12	11	12	11	10	11	10	11	10	11

LetAambi and Bambi have $ 'a' at the beginning of the 1st level.
Aambi bought 30 houses and sold 20 houses in each case. The selling amount – buying amount is $130 in each case. Thus, Aambi had $130 more cash at the end of level 5.
Therefore, at the end of each level , the amount with Aambi = $ (a + 130)
The maximum difference between the cash with Aambi and Bambi at the end of level 5 must have been when Bambi bought the maximum number of houses. Bambi bought 30 houses and did not sell any house in case 10.
The cash with Bambi at the end of level 5 = a – 90 – 80 – 90 = a – 260
The difference = (a + 130) – (a – 260) = 390.
Hence, the required answer is 390.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **15 secs**

Your Attempt: **Skipped**

% Students got it correct: **9 %**

3) If Bambi bought exactly 10 houses in the 5 levels game, then what was the price of one house (in $) at the end of level 2?

- 10
- 9
- 11
- Either 10 or 9

Video Explanation:

Refer to the data below and answer the questions that follow.

In a video game called, 'Business', a house is purchased or sold (through virtual currency) at each level in the 5-level game. At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1.
Aambi and Bambi played this game, competing with each other. They both made different selling and buying strategies. Aambi made the strategy to buy 10 houses when the price goes down as compared to the previous level and sell 10 houses when the price goes up as compared to the previous level. Bambi made the strategy to buy 10 houses when the price goes below $10 and sell 10 houses when the price goes above $11. The beginning price of each house in any level is the same as the closing price of each house at the end of the previous level. Bambi and Aambi started with the same number of houses and had the same amount of cash, and had enough of both. At the end of the level 5, the price of each house was $11.

Explanation:

Change Section here

Using this, 'At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1. At the end of level 5, the price of each house is $11.', the following possible cases of price at the beginning and end of the each level can be drawn :

	Case 1		Case 2		Case 3		Case 4		Case 5	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	11	10	11	10	11	10	11
2	11	12	11	10	11	10	11	12	11	12
3	12	11	10	9	10	11	12	13	12	11
4	11	10	9	10	11	10	13	12	11	12
5	10	11	10	11	10	11	12	11	12	11

	Case 6		Case 7		Case 8		Case 9		Case 10	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	9	10	9	10	9	10	9
2	11	10	9	10	9	10	9	10	9	8
3	10	11	10	11	10	11	10	9	8	9
4	11	12	11	12	11	10	9	10	9	10
5	12	11	12	11	10	11	10	11	10	11

Bambi bought exactly 10 houses in case 2, 7 and 8. In all these 3 cases, the price of one house at the end of level 2 was $10.
Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **105 secs**

Your Attempt: **Skipped**

% Students got it correct: **61 %**

4) If the difference between the amount of cash with Aambi and Bambi was $10 at the end of level 5; then what was the price of one house (in $) at the end of level 3?

Enter your response (as an integer) using the virtual keyboard in the box provided below.

Video Explanation:

Refer to the data below and answer the questions that follow.

In a video game called, 'Business', a house is purchased or sold (through virtual currency) at each level in the 5-level game. At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1.
Aambi and Bambi played this game, competing with each other. They both made different selling and buying strategies. Aambi made the strategy to buy 10 houses when the price goes down as compared to the previous level and sell 10 houses when the price goes up as compared to the previous level. Bambi made the strategy to buy 10 houses when the price goes below $10 and sell 10 houses when the price goes above $11. The beginning price of each house in any level is the same as the closing price of each house at the end of the previous level. Bambi and Aambi started with the same number of houses and had the same amount of cash, and had enough of both. At the end of the level 5, the price of each house was $11.

Explanation:

Change Section here

Using this, 'At the beginning of the first level, each house is priced at $10 (virtual currency). At the end of each level, the price of each house either goes up by $1 or goes down by $1. At the end of level 5, the price of each house is $11.', the following possible cases of price at the beginning and end of the each level can be drawn :

	Case 1		Case 2		Case 3		Case 4		Case 5	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	11	10	11	10	11	10	11
2	11	12	11	10	11	10	11	12	11	12
3	12	11	10	9	10	11	12	13	12	11
4	11	10	9	10	11	10	13	12	11	12
5	10	11	10	11	10	11	12	11	12	11

	Case 6		Case 7		Case 8		Case 9		Case 10	
Level	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end	Price at the beginning	Price at the end
1	10	11	10	9	10	9	10	9	10	9
2	11	10	9	10	9	10	9	10	9	8
3	10	11	10	11	10	11	10	9	8	9
4	11	12	11	12	11	10	9	10	9	10
5	12	11	12	11	10	11	10	11	10	11

We know thatAambi had $130 more than what he and Bambi, individually, had at the start of the game.

Given, the difference between the amount of cash with Aambi and Bambi was $10; thus, Bambi had $120

more than what he had at the start of the game. This is possible when Bambi sold 10 houses at the price

of $12 per house and did not buy any house. This is case 1 and case 6. Here, at the end of level 3, the

price of one house was $11.
Therefore, the required answer is 11.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **35 secs**

Your Attempt: **Skipped**

% Students got it correct: **38 %**

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Refer to the data below and answer the questions that follow.

In 'Build hunger free India' campaign, food grains were distributed in the rural area among poor population. Food grains were distributed in three parcels as per size: small, medium and large. Small size parcel contains 100 kg grains, medium size parcel contains 200 kg grains and large size parcel contains 300 kg grains.

In the month of August; from 1st to 10th August; both small and medium sized parcels were distributed on each day. Only on 11th August, all the three parcels were distributed. On 12th August only medium sized parcels were distributed. From 13th to 18th, only large sized parcels were distributed. From 19th to 31st, both medium and large parcels were distributed. On any day, maximum one parcel of the same size was distributed.

Eight college friends P, Q, R, S, T, U, V and W joined the campaign in the month of August.

Following facts are known about the distribution of the parcels by 8 friends:

1. R, U and W worked on three consecutive days in the same order and the grains distributed by them were in the ascending order. Also each of them distributed a different sized parcel.
2. P and S worked on the same day. U and V worked on the same day. No other two friends worked on the same day.
3. Q and T worked on consecutive days and distributed different sized parcel.
4. Eight friends distributed total 1700 kg grains in the month of August.
5. Each of the eight friends distributed exactly one parcel in the campaign.
6. Exactly two small parcels were distributed by eight friends.

1) How many medium sized parcels were distributed by 8 friends in the campaign, 'Build hunger free India' in the month of August?

Enter your response (as an integer) using the virtual keyboard in the box provided below.

Video Explanation:

Explanation:

	1st – 10th August	11th August	12th August	13th – 18th August	19th – 31st August
Parcel distributed (in kg)	100, 200	100, 200, 300	200	300	200, 300

Using point 1, R, U and W distributed 100 kg, 200 kg and 300 kg parcel either on 9th, 10th and 11th August respectively or on 11th, 12th and 13th August respectively. Using point 2 as U & V worked on the same day they must have distributed different sized parcels. So, it can be concluded that R, U and W distributed parcels on 9th, 10th and 11th August respectively and V distributed 100 kg parcel on 10th August. The following table can be made:

	P	Q	R	S	T	U	V	W
Parcel (in kg)	a	b	100	c	d	200	100	300

a + b + c + d = 1700 – 100 – 200 – 100 – 300 = 1000
This is possible in following ways:
i. 100 + 300 + 300 + 300 = 1000
ii. 200 + 200 + 300 + 300 = 1000

Using condition 6, the case (i) is not valid.
Thus, Q and T distributed 200 kg and 300 kg parcel in any order. And also P and S distributed 200 kg and 300 kg parcel in any order. The table can be updated as follows:

	P	Q	R	S	T	U	V	W
Parcel(in kg)	200/300	200/300	100	200/300	200/300	200	100	300

Thus, 2 parcels of small size (100 kg), 3 parcels of medium size (200 kg) and 3 parcels of large size (300 kg) were distributed by the friends.
3 parcels of medium size (200 kg) were distributed by 8 friends in the campaign, 'Build hunger free India' in the month of August.
Therefore, the required answer is 3.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **385 secs**

Your Attempt: **Skipped**

% Students got it correct: **62 %**

2) How much total grains (in kg) was distributed by P and S together?

Refer to the data below and answer the questions that follow.

In 'Build hunger free India' campaign, food grains were distributed in the rural area among poor population. Food grains were distributed in three parcels as per size: small, medium and large. Small size parcel contains 100 kg grains, medium size parcel contains 200 kg grains and large size parcel contains 300 kg grains.

In the month of August; from 1^{st} to 10^{th} August; both small and medium sized parcels were distributed on each day. Only on 11^{th} August, all the three parcels were distributed. On 12^{th} August only medium sized parcels were distributed. From 13^{th} to 18^{th}, only large sized parcels were distributed. From 19^{th} to 31^{st}, both medium and large parcels were distributed. On any day, maximum one parcel of the same size was distributed.

Eight college friends P, Q, R, S, T, U, V and W joined the campaign in the month of August.

Following facts are known about the distribution of the parcels by 8 friends:

1. R, U and W worked on three consecutive days in the same order and the grains distributed by them were in the ascending order. Also each of them distributed a different sized parcel.
2. P and S worked on the same day. U and V worked on the same day. No other two friends worked on the same day.
3. Q and T worked on consecutive days and distributed different sized parcel.
4. Eight friends distributed total 1700 kg grains in the month of August.
5. Each of the eight friends distributed exactly one parcel in the campaign.
6. Exactly two small parcels were distributed by eight friends.

Video Explanation:

Explanation:

	$1^{st}-10^{th}$ August	11^{th} August	12^{th} August	$13^{th}-18^{th}$ August	$19^{th}-31^{st}$ August
Parcel distributed (in kg)	100, 200	100, 200, 300	200	300	200, 300

Using point 1, R, U and W distributed 100 kg, 200 kg and 300 kg parcel either on 9^{th}, 10^{th} and 11^{th} August respectively or on 11^{th}, 12^{th} and 13^{th} August respectively. Using point 2 as U & V worked on the same day they must have distributed different sized parcels. So, it can be concluded that R, U and W distributed parcels on 9^{th}, 10^{th} and 11^{th} August respectively and V distributed 100 kg parcel on 10^{th} August. The following table can be made:

	P	Q	R	S	T	U	V	W
Parcel (in kg)	a	b	100	c	d	200	100	300

a + b + c + d = 1700 – 100 – 200 – 100 – 300 = 1000
This is possible in following ways:
i. 100 + 300 + 300 + 300 = 1000
ii. 200 + 200 + 300 + 300 = 1000

Using condition 6, the case (i) is not valid.
Thus, Q and T distributed 200 kg and 300 kg parcel in any order. And also P and S distributed 200 kg and 300 kg parcel in any order. The table can be updated as follows:

	P	Q	R	S	T	U	V	W
Parcel(in kg)	200/300	200/300	100	200/300	200/300	200	100	300

Thus, 2 parcels of small size (100 kg), 3 parcels of medium size (200 kg) and 3 parcels of large size (300 kg) were distributed by the friends.
P and S distributed parcels of 200 kg and 300 kg in any order. But the total weight = 200 + 300 = 500 kg.
Therefore, the required answer is 500.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **64 secs**

Your Attempt: **Skipped**

% Students got it correct: **47 %**

3) Which of the following statement is definitely false?

- P and S distributed parcels in the last 10 days of the campaign in the month of August.
- Q and T distributed parcels in the last 10 days of the campaign in the month of August.
- Q and T distributed parcels in the first 10 days of the campaign in the month of August.
- None of these

Refer to the data below and answer the questions that follow.

In 'Build hunger free India' campaign, food grains were distributed in the rural area among poor population. Food grains were distributed in three parcels as per size: small, medium and large. Small size parcel contains 100 kg grains, medium size parcel contains 200 kg grains and large size parcel contains 300 kg grains.

In the month of August; from 1st to 10th August; both small and medium sized parcels were distributed on each day. Only on 11th August, all the three parcels were distributed. On 12th August only medium sized parcels were distributed. From 13th to 18th, only large sized parcels were distributed. From 19th to 31st, both medium and large parcels were distributed. On any day, maximum one parcel of the same size was distributed.

Eight college friends P, Q, R, S, T, U, V and W joined the campaign in the month of August.

Following facts are known about the distribution of the parcels by 8 friends:

1. R, U and W worked on three consecutive days in the same order and the grains distributed by them were in the ascending order. Also each of them distributed a different sized parcel.
2. P and S worked on the same day. U and V worked on the same day. No other two friends worked on the same day.
3. Q and T worked on consecutive days and distributed different sized parcel.
4. Eight friends distributed total 1700 kg grains in the month of August.
5. Each of the eight friends distributed exactly one parcel in the campaign.
6. Exactly two small parcels were distributed by eight friends.

Video Explanation: Change Section here

Explanation:

	1st – 10th August	11th August	12th August	13th – 18th August	19th – 31st August
Parcel distributed (in kg)	100, 200	100, 200, 300	200	300	200, 300

Using point 1, R, U and W distributed 100 kg, 200 kg and 300 kg parcel either on 9th, 10th and 11th August respectively or on 11th, 12th and 13th August respectively. Using point 2 as U & V worked on the same day they must have distributed different sized parcels. So, it can be concluded that R, U and W distributed parcels on 9th, 10th and 11th August respectively and V distributed 100 kg parcel on 10th August. The following table can be made:

	P	Q	R	S	T	U	V	W
Parcel (in kg)	a	b	100	c	d	200	100	300

a + b + c + d = 1700 – 100 – 200 – 100 – 300 = 1000
This is possible in following ways:
i. 100 + 300 + 300 + 300 = 1000
ii. 200 + 200 + 300 + 300 = 1000

Using condition 6, the case (i) is not valid.
Thus, Q and T distributed 200 kg and 300 kg parcel in any order. And also P and S distributed 200 kg and 300 kg parcel in any order. The table can be updated as follows:

	P	Q	R	S	T	U	V	W
Parcel(in kg)	200/300	200/300	100	200/300	200/300	200	100	300

Thus, 2 parcels of small size (100 kg), 3 parcels of medium size (200 kg) and 3 parcels of large size (300 kg) were distributed by the friends.

P and S distributed parcels of 200 kg and 300 kg on the same day. So definitely they distributed parcels on any day from 19th to 31st August. This statement may be correct.

Q and T distributed parcels of 200 kg and 300 kg on two consecutive days, these two days can be any two days from 18th – 31st August. This statement may be correct.

Q and T distributed parcels of 200 kg and 300 kg on two consecutive days, which is not possible in first 10 days of August. Hence, this statement is definitely false.

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **40 secs**

Your Attempt: **Skipped**

% Students got it correct: **52 %**

4) At the most, how many parcels could have been distributed from 11th to 20th August?

- 4
- 5
- 3

Either 4 or 5

Change Section here

Refer to the data below and answer the questions that follow.

In 'Build hunger free India' campaign, food grains were distributed in the rural area among poor population. Food grains were distributed in three parcels as per size: small, medium and large. Small size parcel contains 100 kg grains, medium size parcel contains 200 kg grains and large size parcel contains 300 kg grains.

In the month of August; from 1st to 10th August; both small and medium sized parcels were distributed on each day. Only on 11th August, all the three parcels were distributed. On 12th August only medium sized parcels were distributed. From 13th to 18th, only large sized parcels were distributed. From 19th to 31st, both medium and large parcels were distributed. On any day, maximum one parcel of the same size was distributed.

Eight college friends P, Q, R, S, T, U, V and W joined the campaign in the month of August.

Following facts are known about the distribution of the parcels by 8 friends:

1. R, U and W worked on three consecutive days in the same order and the grains distributed by them were in the ascending order. Also each of them distributed a different sized parcel.
2. P and S worked on the same day. U and V worked on the same day. No other two friends worked on the same day.
3. Q and T worked on consecutive days and distributed different sized parcel.
4. Eight friends distributed total 1700 kg grains in the month of August.
5. Each of the eight friends distributed exactly one parcel in the campaign.
6. Exactly two small parcels were distributed by eight friends.

Video Explanation:

Explanation:

	1st – 10th August	11th August	12th August	13th – 18th August	19th – 31st August
Parcel distributed (in kg)	100, 200	100, 200, 300	200	300	200, 300

Using point 1, R, U and W distributed 100 kg, 200 kg and 300 kg parcel either on 9th, 10th and 11th August respectively or on 11th, 12th and 13th August respectively. Using point 2 as U & V worked on the same day they must have distributed different sized parcels. So, it can be concluded that R, U and W distributed parcels on 9th, 10th and 11th August respectively and V distributed 100 kg parcel on 10th August. The following table can be made:

	P	Q	R	S	T	U	V	W
Parcel (in kg)	a	b	100	c	d	200	100	300

a + b + c + d = 1700 – 100 – 200 – 100 – 300 = 1000
This is possible in following ways:
i. 100 + 300 + 300 + 300 = 1000
ii. 200 + 200 + 300 + 300 = 1000

Using condition 6, the case (i) is not valid.
Thus, Q and T distributed 200 kg and 300 kg parcel in any order. And also P and S distributed 200 kg and 300 kg parcel in any order. The table can be updated as follows:

	P	Q	R	S	T	U	V	W
Parcel(in kg)	200/300	200/300	100	200/300	200/300	200	100	300

Thus, 2 parcels of small size (100 kg), 3 parcels of medium size (200 kg) and 3 parcels of large size (300 kg) were distributed by the friends. Here, we need to maximise the number of friends distributing parcels from 11th to 20th August. On 11th August, W distributed one parcel. On 12th (200 kg) and 13th (300 kg), Q and T could have distributed parcels. On either 19th or 20th August P and S could have distributed parcels. So maximum 5 parcels could have been distributed from 11th to 20th August.
Hence, [2].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **49 secs**

Your Attempt: **Skipped**

% Students got it correct: **51 %**

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Refer to the data below and answer the questions that follow.

Seven groups - Drishadvati, Beas, Ghaggar, Hindon, Tambraparani, Khadirbet and Uchha of students from class XI were given a project to collate information about excavation site from various states/territories related to INDUS VALLEY CIVILISATION and present.
Excavation sites: Manda, Dholavira, Alamgirpur, Sangol, Adichhanallure, Rakhigarhi and Bhirrana
States/territories: Jammu, Gujarat, Delhi, Punjab, Tamilnadu, Haryana
Two sites are in Haryana.
The seven groups were from three sections of class XI - A, B and C. Number of groups from each section was different. 25 minutes were given for each group to present. There was a gap of 5 minutes between two consecutive presentations and also a gap of more than 30 minutes between two presentations from group of the same section.
The following details are known:
a. Beas group started the presentation at 10:30 AM. This was the last but one presentation.
b. The name of a group does not start with the same letter of a state/territory in which excavation site (on which the presentation was based) is located except for one group.
c. Ghaggar was the last group to present from their section. The presentation was based on the excavation site Bhirrana – Haryana.
d. 'Hindon was the second group to present from section B. The group presented on Alamgirpur- Delhi.
e. Presentation on Adichhanallure-Tamilnadu was after the presentation on Sangol-Punjab . Sangol- Punjab was the 3rd presentation from section B.
f. Khadirbet was the first group to start with the presentation at 8:00 AM on Dholavira-Gujarat.
g. Group Uchha neither presented site Rakhigarhi nor the site from state Jammu.
h. Two groups from section A chose excavation sites from the same state.

1) Which group was there in the section when Drishadvati left the room for presentation?

- Ghaggar
- Beas
- No group ✗
- Tambraparni

Video Explanation:

Explanation:

The three sections do not have equal number of groups. Therefore, sections A, B and C have 1, 2 and 4 groups in some order. Statement (e and h) ⇒ Section A has exactly two groups presenting excavation sites from Haryana. Statement (d) ⇒ Section B is not the section with only one group. So it has to be section C. Thus, section B has 4 groups. Now from statement (b), the only possible group-state pair with the name starting with the same letter is Tambraparani-Tamilnadu
There is a gap of at least 30 minutes between two presentations from group of the same section. So, 1st, 3rd, 5th and 7th were the presentations from groups of section B. From statement (f), the first presentation started at 8 am, the next presentations were at 9 am, 10 am and 11 am.
Thus with the help of statement (a, e & f), we have

Slot	Room	Group	Site	State
8 am - 8:25 am	B	Khadirbet	Dholavira	Gujarat
9 am - 9:25 am	B	Hindon	Alamgirpur	Delhi
10 am - 10:25 am	B		Sangol	Punjab
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

Now we need to consider states- Jammu, Punjab & Haryana and groups – Beas, Uchha & Drishadvati and sites – Manda, Rakhigarhi.
From statement (g), Rakhigarhi is not in state Jammu. So Manda-Jammu and Rakhigarhi-Haryana. Therefore, Uchha-Sangol- Punjab.
From statements (a) and (c), it can be concluded that the presentation on Rakhigarhi-Haryana was at 8:30 am – 8:55 am and this must be by group Drishadvati. Thus, we have

Slot	Room	Group	Site	State
8 am - 8:25 am	B	Khadirbet	Dholavira	Gujarat
8:30 am - 8:55 am	A	Drishadvati	Rakhigarhi	Haryana
9 am - 9:25 am	B	Hindon	Alamgirpur	Delhi
9:30 am - 9:55 am	A	Ghaggar	Bhirrana	Haryana
10 am - 10:25 am	B	Uchha	Sangol	Punjab
10:30 am - 10:55 am	C	Beas	Manda	Jammu
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

Ghaggar group was present in the section when Drishadvati left the section for presentation.
Hence, [1].

Correct Answer:

Time taken by you: **843 secs**

Avg Time taken by all students: **262 secs**

Your Attempt: **Wrong**

% Students got it correct: **33 %**

Questions: 25 to 32 Section : Data Interpretation & Logical Reasoning

Refer to the data below and answer the questions that follow.

Seven groups - Drishadvati, Beas, Ghaggar, Hindon, Tambraparani, Khadirbet and Uchha of students from class XI were given a project to collate information about excavation site from various states/territories related to INDUS VALLEY CIVILISATION and present.
Excavation sites: Manda, Dholavira, Alamgirpur, Sangol, Adichhanallure, Rakhigarhi and Bhirrana
States/territories: Jammu, Gujarat, Delhi, Punjab, Tamilnadu, Haryana
Two sites are in Haryana.
The seven groups were from three sections of class XI - A, B and C. Number of groups from each section was different. 25 minutes were given for each group to present. There was a gap of 5 minutes between two consecutive presentations and also a gap of more than 30 minutes between two presentations from group of the same section.
The following details are known:
a. Beas group started the presentation at 10:30 AM. This was the last but one presentation.
b. The name of a group does not start with the same letter of a state/territory in which excavation site (on which the presentation was based) is located except for one group.
c. Ghaggar was the last group to present from their section. The presentation was based on the excavation site Bhirrana – Haryana.
d. 'Hindon was the second group to present from section B. The group presented on Alamgirpur- Delhi.
e. Presentation on Adichhanallure-Tamilnadu was after the presentation on Sangol-Punjab . Sangol- Punjab was the 3rd presentation from section B.
f. Khadirbet was the first group to start with the presentation at 8:00 AM on Dholavira-Gujarat.
g. Group Uchha neither presented site Rakhigarhi nor the site from state Jammu.
h. Two groups from section A chose excavation sites from the same state.

Previous Next Exit Review

Change Section here

2) Group **Uchha started the presentation at _**

- 10 am ✓
- 11 am
- 8:30 am
- 9:30 am

Video Explanation:

Explanation:

The three sections do not have equal number of groups. Therefore, sections A, B and C have 1, 2 and 4 groups in some order. Statement (e and h) ⇒ Section A has exactly two groups presenting excavation sites from Haryana. Statement (d) ⇒ Section B is not the section with only one group. So it has to be section C. Thus, section B has 4 groups. Now from statement (b), the only possible group-state pair with the name starting with the same letter is Tambraparani-Tamilnadu
There is a gap of at least 30 minutes between two presentations from group of the same section. So, 1st, 3rd, 5th and 7th were the presentations from groups of section B. From statement (f), the first presentation started at 8 am, the next presentations were at 9 am, 10 am and 11 am.
Thus with the help of statement (a, e & f), we have

Slot	Room	Group	Site	State
8 am - 8:25 am	B	Khadirbet	Dholavira	Gujarat
9 am - 9:25 am	B	Hindon	Alamgirpur	Delhi
10 am - 10:25 am	B		Sangol	Punjab
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

Now we need to consider states- Jammu, Punjab & Haryana and groups – Beas, Uchha & Drishadvati and sites – Manda, Rakhigarhi.
From statement (g), Rakhigarhi is not in state Jammu. So Manda-Jammu and Rakhigarhi-Haryana. Therefore, Uchha-Sangol- Punjab.
From statements (a) and (c), it can be concluded that the presentation on Rakhigarhi-Haryana was at 8:30 am – 8:55 am and this must be by group Drishadvati. Thus, we have

Slot	Room	Group	Site	State
8 am - 8:25 am	B	Khadirbet	Dholavira	Gujarat
8:30 am - 8:55 am	A	Drishadvati	Rakhigarhi	Haryana
9 am - 9:25 am	B	Hindon	Alamgirpur	Delhi
9:30 am - 9:55 am	A	Ghaggar	Bhirrana	Haryana
10 am - 10:25 am	B	Uchha	Sangol	Punjab
10:30 am - 10:55 am	C	Beas	Manda	Jammu
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

Uchha started the presentation at 10 am. Hence, [1].

Correct Answer:

Time taken by you: **4 secs**

Avg Time taken by all students: **84 secs**

Your Attempt: **Correct**

% Students got it correct: **40 %**

3) Presentation about which site was given at 9:30 am?

- Bhirrana ✓
- Alamgirpur
- Sangol
- Rakhigarhi

Refer to the data below and answer the questions that follow.

Seven groups - Drishadvati, Beas, Ghaggar, Hindon, Tambraparani, Khadirbet and Uchha of students from class XI were given a project to collate information about excavation site from various states/territories related to INDUS VALLEY CIVILISATION and present.
Excavation sites: Manda, Dholavira, Alamgirpur, Sangol, Adichhanallure, Rakhigarhi and Bhirrana
States/territories: Jammu, Gujarat, Delhi, Punjab, Tamilnadu, Haryana
Two sites are in Haryana.
The seven groups were from three sections of class XI - A, B and C. Number of groups from each section was different. 25 minutes were given for each group to present. There was a gap of 5 minutes between two consecutive presentations and also a gap of more than 30 minutes between two presentations from group of the same section.
The following details are known:
a. Beas group started the presentation at 10:30 AM. This was the last but one presentation.
b. The name of a group does not start with the same letter of a state/territory in which excavation site (on which the presentation was based) is located except for one group.
c. Ghaggar was the last group to present from their section. The presentation was based on the excavation site Bhirrana – Haryana.
d. 'Hindon was the second group to present from section B. The group presented on Alamgirpur- Delhi.
e. Presentation on Adichhanallure-Tamilnadu was after the presentation on Sangol-Punjab . Sangol- Punjab was the 3rd presentation from section B.
f. Khadirbet was the first group to start with the presentation at 8:00 AM on Dholavira-Gujarat.
g. Group Uchha neither presented site Rakhigarhi nor the site from state Jammu.
h. Two groups from section A chose excavation sites from the same state.

Explanation:

The three sections do not have equal number of groups. Therefore, sections A, B and C have 1, 2 and 4 groups in some order. Statement (e and h) ⇒ Section A has exactly two groups presenting excavation sites from Haryana. Statement (d) ⇒ Section B is not the section with only one group. So it has to be section C. Thus, section B has 4 groups. Now from statement (b), the only possible group-state pair with the name starting with the same letter is Tambraparani-Tamilnadu
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Now we need to consider states- Jammu, Punjab & Haryana and groups – Beas, Uchha & Drishadvati and sites – Manda, Rakhigarhi.
From statement (g), Rakhigarhi is not in state Jammu. So Manda-Jammu and Rakhigarhi-Haryana. Therefore, Uchha-Sangol- Punjab.
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9:30 am - 9:55 am	A	Ghaggar	Bhirrana	Haryana
10 am - 10:25 am	B	Uchha	Sangol	Punjab
10:30 am - 10:55 am	C	Beas	Manda	Jammu
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

Presentation about site Bhirrana was given at 9:30 am. Hence, [1].

Correct Answer:

Time taken by you: **8 secs**

Avg Time taken by all students: **82 secs**

Your Attempt: **Correct**

% Students got it correct: **54 %**

4) The excavation site Manda is in which state?

- Haryana
- Gujarat
- Punjab
- Jammu

Video Explanation:

Refer to the data below and answer the questions that follow.

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Two sites are in Haryana.
The seven groups were from three sections of class XI - A, B and C. Number of groups from each section was different. 25 minutes were given for each group to present. There was a gap of 5 minutes between two consecutive presentations and also a gap of more than 30 minutes between two presentations from group of the same section.
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g. Group Uchha neither presented site Rakhigarhi nor the site from state Jammu.
h. Two groups from section A chose excavation sites from the same state.

Explanation:

Change Section here

The three sections do not have equal number of groups. Therefore, sections A, B and C have 1, 2 and 4 groups in some order. Statement (e and h) ⇒ Section A has exactly two groups presenting excavation sites from Haryana. Statement (d) ⇒ Section B is not the section with only one group. So it has to be section C. Thus, section B has 4 groups. Now from statement (b), the only possible group-state pair with the name starting with the same letter is Tambraparani-Tamilnadu
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Now we need to consider states- Jammu, Punjab & Haryana and groups – Beas, Uchha & Drishadvati and sites – Manda, Rakhigarhi.
From statement (g), Rakhigarhi is not in state Jammu. So Manda-Jammu and Rakhigarhi-Haryana. Therefore, Uchha-Sangol- Punjab.
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10 am - 10:25 am	B	Uchha	Sangol	Punjab
10:30 am - 10:55 am	C	Beas	Manda	Jammu
11 am - 11:25 am	B	Tambraparani	Adichhanallure	Tamilnadu

The excavation site Manda is in Jammu. Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **130 secs**

Your Attempt: **Skipped**

% Students got it correct: **54 %**

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Refer to the data below and answer the questions that follow.

Monika bought 6 stationery items, Pen, Pencil, Eraser, Sharpener, Notebook and Compass Box. She bought these items one after the other. She had total Rs. 200 with her. Each item costs Rs. 10 or Rs. 20 or Rs. 30 or Rs. 50 or Rs. 60. Further the following points are known:

1. The cost price of Compass Box was Rs. 30 more than her total spending as soon as she bought Pen.
2. Monika had Rs. 100 before she bought Compass Box.
3. After buying a Notebook, she had Rs. 40 less than what she had after buying Pencil.
4. Compass Box was the 5^{th} item bought.
5. Cost price of Compass Box was not Rs. 60.
6. Pencil and Notebook were not the consecutive items bought by Monika.

1) Which was the first item bought by Monika?

- Pen ✗
- Pencil
- Eraser
- Cannot be determined

Video Explanation:

Explanation:

Conditions 1 and 5 indicate that Monika's total spending as soon as she bought Pen must be Rs. 20.

Also, the cost price of the Compass Box = Rs. 50

Condition 3 indicates that after buying Pencil, she bought items worth Rs. 40 till she bought Notebook (including Notebook).

Using the conditions 3 and 4, it can be concluded that Notebook must be either 4^{th} or 3^{rd} item bought.

Case I: Notebook is the 4^{th} item bought.

In this case Pencil can be either 1^{st} or 2^{nd} item bought.

If Pencil is the 1^{st} item bought; then using conditions 1 and 3; sum of the first four items must be Rs. 50. Hence, Monika would have Rs. 150 now. Using conditions 5 and 2, it can be concluded that this is not valid case.

If Pencil is the 2^{nd} item bought then, below mentioned are possible cases:

	Case A	Case B	Case C
Pen	20	20	20
Pencil	**40**	**40**	**40**
Sharpener/Eraser	10	30	20
Note Book	30	10	20
Compass Box	50	50	50
Sharpener/Eraser			

As none of the items' cost is Rs. 40, all these cases are invalid.

Case II - Note Book is the 3^{rd} item bought.

Using condition 3, Pencil must be the 1^{st} item bought. Using condition 1, Pen must be the 2^{nd} item bought. The cost of Pen and Pencil must be Rs. 10 each and the cost of Note Book must be Rs. 30. Therefore, we can have the following table.

Pencil	Rs. 10
Pen	Rs. 10
Notebook	Rs. 30
Eraser / Sharpener	Rs. 50
Compass Box	Rs. 50
Eraser / Sharpener	Rs. (10/20/30/50)

The first item bought by Monika was Pencil.
Hence, [2].

Correct Answer:

Time taken by you: **657 secs**

Avg Time taken by all students: **281 secs**

Your Attempt: **Wrong**

% Students got it correct: **40 %**

Change Section here

Refer to the data below and answer the questions that follow.

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4. Compass Box was the 5^{th} item bought.
5. Cost price of Compass Box was not Rs. 60.
6. Pencil and Notebook were not the consecutive items bought by Monika.

2) What was the cost price of Notebook?

- Rs. 10
- Rs. 40
- Rs. 30
- Rs. 50

Video Explanation:

Explanation:

Conditions 1 and 5 indicate that Monika's total spending as soon as she bought Pen must be Rs. 20.

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As none of the items' cost is Rs. 40, all these cases are invalid.

Case II - Note Book is the 3^{rd} item bought.

Using condition 3, Pencil must be the 1^{st} item bought. Using condition 1, Pen must be the 2^{nd} item bought. The cost of Pen and Pencil must be Rs. 10 each and the cost of Note Book must be Rs. 30. Therefore, we can have the following table.

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Pen	Rs. 10
Notebook	Rs. 30
Eraser / Sharpener	Rs. 50
Compass Box	Rs. 50
Eraser / Sharpener	Rs. (10/20/30/50)

The cost price of the Notebook was Rs. 30.

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **113 secs**

Your Attempt: **Skipped**

Refer to the data below and answer the questions that follow.

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4. Compass Box was the 5^{th} item bought.
5. Cost price of Compass Box was not Rs. 60.
6. Pencil and Notebook were not the consecutive items bought by Monika.

3) How many items were definitely bought before Sharpener and Eraser both?

- 2
- 3
- 4
- 1

Video Explanation:

Explanation:

Conditions 1 and 5 indicate that Monika's total spending as soon as she bought Pen must be Rs. 20.

Also, the cost price of the Compass Box = Rs. 50

Condition 3 indicates that after buying Pencil, she bought items worth Rs. 40 till she bought Notebook (including Notebook).

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Compass Box	50	50	50
Sharpener/Eraser			

As none of the items' cost is Rs. 40, all these cases are invalid.

Case II - Note Book is the 3^{rd} item bought.

Using condition 3, Pencil must be the 1^{st} item bought. Using condition 1, Pen must be the 2^{nd} item bought. The cost of Pen and Pencil must be Rs. 10 each and the cost of Note Book must be Rs. 30. Therefore, we can have the following table.

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Eraser / Sharpener	Rs. 50
Compass Box	Rs. 50
Eraser / Sharpener	Rs. (10/20/30/50)

Pen, Pencil and Notebook were definitely bought before Eraser and Sharpner both.
Hence, [2].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **21 secs**

Change Section here

Your Attempt: **Skipped**

% Students got it correct: **38 %**

Refer to the data below and answer the questions that follow.

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4. Compass Box was the 5^{th} item bought.
5. Cost price of Compass Box was not Rs. 60.
6. Pencil and Notebook were not the consecutive items bought by Monika.

4) What is the best that can be said about the total amount spent by Monika?

- At most Rs. 160
- At least Rs. 180
- At least Rs. 160
- At most Rs. 180

Video Explanation:

Explanation:

Conditions 1 and 5 indicate that Monika's total spending as soon as she bought Pen must be Rs. 20.

Also, the cost price of the Compass Box = Rs. 50

Condition 3 indicates that after buying Pencil, she bought items worth Rs. 40 till she bought Notebook (including Notebook).

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Pencil	Rs. 10
Pen	Rs. 10
Notebook	Rs. 30
Eraser / Sharpener	Rs. 50
Compass Box	Rs. 50
Eraser / Sharpener	Rs. (10/20/30/50)

Total amount paid for the first five items bought = 10 + 10 + 30 + 50 + 50 = 150. The minimum cost of the sixth item = Rs. 10. Therefore, Monika must have sent at least Rs. 160. Hence, [3].

Refer to the data below and answer the questions that follow.

Monika bought 6 stationery items, Pen, Pencil, Eraser, Sharpener, Notebook and Compass Box. She bought these items one after the other. She had total Rs. 200 with her. Each item costs Rs. 10 or Rs. 20 or Rs. 30 or Rs. 50 or Rs. 60. Further the following points are known:

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4. Compass Box was the 5^{th} item bought.
5. Cost price of Compass Box was not Rs. 60.
6. Pencil and Notebook were not the consecutive items bought by Monika.

Time taken by you: **0 secs**

Avg Time taken by all students: **94 secs**

Your Attempt: **Skipped**

% Students got it correct: **64 %**

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